

Remarks / Arguments

Applicants have amended the title to conform to the pending claims.

On page 2 of the Office Action, the Examiner rejected claim 95 under 35 U.S.C § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter of Applicants' invention. Applicants have amended the claim as shown and believe it is now in good form.

On page 2 of the Office Action, the Examiner rejected claims 83 and 95 under 35 U.S.C § 102(b) as being anticipated by Lemelson (US Patent 3,504,063). For the reasons discussed below and in view of the claims as now presented, Applicants respectfully traverse this rejection.

Lemelson discloses an apparatus and method for selectively depositing a particulate material against one or more selected areas of the surface of a mold, retaining said material against the areas on which it is deposited, and solidifying the deposited material either prior to or immediately after disposing a molding material in the mold in a manner to fuse the deposited material to the molding material so as to form a unitary and integral structure of the two.

Applicants have amended the independent claim 83 to more particularly focus on a method for compression molding at least one polymer to provide a compression molded part with integrally formed graphics. The method requires the steps of creating a molten billet of the at least one polymer and situating a sheet or film containing graphics into a compression mold of a compression press. The claim 83 states that at least a portion of the sheet or film lies in a plane that is generally planar after it is situated in the compression mold. The method further requires the steps of placing the molten billet onto the sheet or film and into the compression mold of the compression press and compressing the molten billet and the sheet or film to provide a part having the sheet or film integrally molded therein and wherein the sheet or film comprises a graphics side facing away from the part, and performing the compression molding step using the compression mold having at least one area that is generally planar for receiving the at least a portion of the sheet or film.

Note that Lemelson does not disclose placing a sheet into the mold and compression molding a part in the manner claimed by Applicants. Applicants respectfully direct the Examiner's attention to Figs. 3, 4 and 6, 7 of Lemelson wherein it is shown that a

sheet is placed on a spherically-shaped mold member which is then situated in the mold member 11 and thereafter a mold material, presumably through orifice 38 (Fig. 9).

There is no teaching in Lemelson which suggests inserting a sheet or film into a mold and then placing a plasticated billet directly onto the sheet or film and in the same mold member and subsequently compression molding the combination. Note also that Applicants' independent claim 83 states at least a portion of the sheet or film lying in a plane that is generally planar after it is placed in the mold, and performing the compression molding step using a compression mold having at least one area that is generally planar for receiving said at least a portion of said sheet or film.

Moreover, Applicants have further focused the claims by adding the step of performing said compression molding step using said compression mold having at least one area that is generally planar. The mold in Lemelson clearly shows spherical-shaped molding members which receive the sheet 35 which is apparently held in place by a vacuum. The sheet assumes a spherical shape after it is received on the upper mold. There is no teaching in Lemelson that a portion of a sheet or film be generally planar or lie in a plane that is generally planar during the compression process or that suggests placing a billet on the sheet. If such a billet were placed on the sheet in Lemelson, it would likely fall off due to gravity.

Finally, note that the sheet or film and billet are placed in the same member of the mold.

Claim 95 depends directly from amended independent claim 83 and is believed to be in condition for allowance for the reasons stated above relative to claim 83.

On page 3 of the Office Action, the Examiner rejected claim 84 under 35 U.S.C § 103(a) as being unpatentable over Lemelson in view of Jameson (US Pat. 5,238,633). For the reasons discussed above relative to Lemelson, in view of the claim as presented and also for the following reasons, Applicants believe this claim is not unpatentable over Lemelson in view of Jameson.

Jameson discloses a method and apparatus for forming an extruded plastic lumbar product from a commingled plastic waste feed stock. The apparatus generally includes an extruder portion and a forming portion. The extruder portion includes a compound extruder which compresses and melts the waste product by a sudden transition within a constant pitch conveyer. From the compound extruder, the melt is introduced into a hot melt

extruder which is formed so as to prevent vortex of the melt or mixing of the different resins. The hot melt conveyor includes a diminishing pitch along its length and a short transition section and metering section. The hot melt is then formed into a desired profile through a cross-head die in which a series of rovings are introduced into the melt. The rovings serve as a reinforcement for the extruded product as well as define the extruded profile feed rate. Because of commingled blend of dissimilar resins in the feed material, there are often inconsistencies in the melt strength. The rovings compensate for these inconsistencies and provide an extruded product having the desired strength and stiffness characteristics.

In addition to the arguments earlier, there is no teaching in either Jameson or Lemelson that suggests that these references be combined. Lemelson discloses an injection mold and the extruder of Jameson is used to extrude a lumbar product. Even if features of Jameson and Lemelson were combined, it would not disclose the method steps of claim 83.

Even if it were obvious to combine the references, the teaching of one or both references would seem to be destroyed and the resultant combination fails to teach of the limitations of Applicants' claim 83. For example, Jameson teaches of extruding a plastic lumbar product, not a billet. Thus, the combination fails to teach of situating a billet on the sheet, or providing a sheet or film that has a portion that is generally planar when situated in the mold.

For all the foregoing reasons, Applicants believe claim 84 is not unpatentable over Lemelson in view of Jameson.

On page 4 of the Office Action, the Examiner rejected claims 85-87 under 35 U.S.C § 103(a) as being unpatentable over Lemelson in view of Hawley (US Pat. 5,165,941). In view of the claims as now presented, for the reasons discussed above regarding Lemelson and also for the following reasons, Applicants believe that claims 85-87 are not unpatentable over Lemelson in view of Hawley.

Hawley discloses a multiple extruder apparatus for compounding thermoplastic resin and reinforcing fibers incorporating a resin extruder in which thermoplastic resin pellets are melted, and a compounding extruder in which the molten thermoplastic resin is mixed in intimate contact with long reinforcing fibers of at least one inch in length. The melted thermoplastic resin is introduced into the compounding extruder at a point downstream of the inlet point for the reinforcing fibers, so that the fibers are mechanically worked and

heated before coming into contact with heated, molten thermoplastic resin. The extrudate from the compounding extruder consists of a homogeneous, molten mass of thermoplastic resin having discrete lengths of fibers randomly dispersed therein.

Applicants respectfully submit that neither Hawley nor Lemelson teaches of situating a sheet or film in a mold, placing a billet onto the sheet or film, and then compression molding the combination of the two to form a part. Indeed, whether viewed alone or in combination, they appear to teach away from this feature in that Lemelson teaches of use of a sheet that is held in place by vacuum on the upper arcuate mold member, and Hawley teaches of an extruder that does not utilize any sheet at all. Indeed, the references seem to teach away from such combination because Hawley appears to show the use of a press that does not use any vacuum, while Lemelson clearly shows the use of a vacuum to hold the sheet in place.

Even if it were obvious to combine the references as suggested by the Examiner, the resultant combination would seem to suggest that the extrusion of Hawley be placed on the upper die 112 (Fig. 1), not placed in the die 114. Note that the Hawley reference would seem to require substantial engineering changes to be able to accommodate situating a sheet on the surface 112, such as vacuum retention and the like and also to be able to situate the billet on the compression mold. Moreover, note that the molds of both Lemelson and Hawley deal with a surface that is generally spherical or semi-spherical as opposed to Applicants' claimed method which refers to a mold having at least one area that is generally planar. It would appear that no portion of the sheet in Lemelson is planar during compression and would not become planar even if it were used with Hawley.

For the Examiner's further understanding, a feature of Applicants' method is that after the sheet or film is placed in the mold and the billet is placed on the sheet or film, an upper mold member is driven and compresses the billet and during such compression, the billet "spreads out" to cover the sheet in the desired manner. As mentioned, at least a portion of the sheet or film and at least a portion of the mold is generally planar.

Moreover, even if the references were combined as the Examiner suggests, it would appear that the resultant combination would not teach of placing a sheet or film in the mold and then placing a billet on the sheet or film. Even assuming arguendo Lemelson could be used with a billet, it would seem to suggest placing a billet in the bottom mold and the sheet on an upper mold member, with the sheet being held in place by a vacuum during the

molding process. Note that Applicants' sheet or film and billet are situated in the same mold member.

Moreover, even the resultant combination would fail to teach of Applicants' performing step which recites that the compression molding step uses a compression mold having at least one area that is generally planar. Notice that both Hawley and Lemelson teach of spherical or semi-spherical mold members that are of a spherical shape and do not have any area that is generally planar.

Applicants' claims 84 and 87 are dependant claims and contain limitations in addition to the limitations of the respective base claim 83. Accordingly, it is believed that these claims, with their additional limitations, are not taught or shown by the references. For example, claim 87 recites heating at least one molding material between a controlled temperature range of 375 – 575 degrees Fahrenheit. There is no teaching in the references that suggest that this step, in combination with the steps recited in claim 83 are shown or taught by either Lemelson or Hawley.

Claims 85 and 86 have been cancelled.

On Page 4 of the Office Action, the Examiner rejected claim 94 under 35 U.S.C § 103(a) as being unpatentable over Lemelson.

Claim 94 depends directly from the currently amended claim 83 and Applicants have amended claim 94 as shown. In view of the claims as now presented, and for the reasons discussed earlier regarding Lemelson, Applicants believe that claim 94 is not unpatentable over Lemelson in view of Hawley.

For all the foregoing reasons and in view of the amended claims as now presented, Applicants believe all claims as now pending are not anticipated by the references cited by the Examiner, and accordingly, they should be allowed.

APPLICANTS RESPECTFULLY REQUEST AN INTERVIEW WITH THE EXAMINER IF THE EXAMINER DOES NOT BELIEVE THIS AMENDMENT PLACES THE APPLICATION IN CONDITION FOR ALLOWANCE AND PRIOR TO THE ISSUANCE OF ANY FINAL ACTION.

The Commissioner is hereby authorized to charge any additional fees under 37 C.F.R. 1.16 and 1.17 which may be required by this paper, or to credit any overpayment, to Deposit Account No. 50-1287. Applicants hereby provide a general request for any extension of time which may be required at any time during the prosecution of the

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application. The Commissioner is also authorized to charge any fees which have not been previously paid for by check and which are required during the prosecution of this application to Deposit Account No. 50-1287. (Should Deposit Account No. 50-1287 be deficient, please charge any further deficiencies to Deposit Account No. 10-0220).

Applicants are filing concurrently herewith a request for a one-month extension of time.

Applicants invite the Examiner to contact the undersigned via telephone with any questions or comments regarding this case.

Reconsideration and favorable action are respectfully requested.

Respectfully submitted,

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